

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A gas oil fraction hydrotreatment process comprising:

providing as a feed oil a hydrorefined petroleum-based hydrocarbon oil with a sulfur content of 5-15 ppm by mass, a total aromatic content of 10-25 % by volume and a boiling point range of 150-380°C ; and

subjecting said feed oil to hydrotreatment in the presence of a hydrogenation catalyst including at least one active metal selected from the group consisting of Ru, Rh, Ir, Pd and Pt to simultaneously obtain an a ultralow sulfur and low aromatic gas oil fraction having a sulfur content of not greater than 1 ppm by mass and a total aromatic content of not greater than 1 % by volume.

2. (Previously Presented) A gas oil fraction hydrotreatment process according to claim 1,

wherein said feed oil has a monocyclic aromatic content of 9-18 % by volume and a bicyclic or greater aromatic content of 1-7 % by volume, and said ultralow sulfur and low aromatic gas oil fraction has a bicyclic or greater aromatic content of not greater than 0.2 % by volume.

3. (Previously Presented) A gas oil fraction hydrotreatment process according to claim 1 wherein reaction conditions for said hydrotreatment are preferably

a reaction temperature of 170-320°C, a hydrogen partial pressure of 2-10 MPa, a liquid hourly space velocity of 0.1-2 h⁻¹ and a hydrogen/oil ratio of 100-800 NL/L.

4. (Previously Presented) A gas oil fraction hydrotreatment process according to claim 1,

wherein said feed oil has a paraffin content of 30-60 % by volume and a naphthene content of 25-60 % by volume, and said ultralow sulfur and low aromatic gas oil fraction has a paraffin content of 30-60 % by volume and a naphthene content of 40-70 % by volume.

5. (Cancelled).

6. (Previously Presented) A gas oil fraction hydrotreatment process according to claim 1,

wherein said hydrogenation catalyst includes a porous support comprising alumina and at least one substance selected from the group consisting of titania, zirconia, boria, silica, phosphorus and zeolite.

7. (Cancelled).

8. (Currently Amended) An A ~~ultralow sulfur and low aromatic~~ gas oil fraction having a sulfur content of not greater than 1 ppm by mass and a total aromatic

content of not greater than 1 % by volume, formed by a process comprising ~~the steps of~~:

providing as a feed oil a hydrorefined petroleum-based hydrocarbon oil with a sulfur content of 5-15 ppm by mass, a total aromatic content of 10-25 % by volume and a boiling point range of 150-380°C; and

subjecting said feed oil to hydrotreatment in the presence of a hydrogenation catalyst including at least one active metal selected from the group consisting of Ru, Rh, Ir, Pd and Pt to simultaneously obtain an a ultralow sulfur and a low aromatic gas oil fraction having a sulfur content of not greater than 1 ppm by mass and a total aromatic content of not greater than 1 % by volume.

9. (Currently Amended) A gas oil composition comprising an a ultralow sulfur and a low aromatic gas oil fraction having a sulfur content of not greater than 1 ppm by mass and a total aromatic content of not greater than 1 % by volume, formed by a process comprising ~~the steps of~~:

providing as a feed oil a hydrorefined petroleum-based hydrocarbon oil with a sulfur content of 5-15 ppm by mass, a total aromatic content of 10-25 % by volume and a boiling point range of 150-380°C; and

subjecting said feed oil to hydrotreatment in the presence of a hydrogenation catalyst including at least one active metal selected from the group consisting of Ru, Rh, Ir, Pd and Pt to simultaneously obtain an a ultralow sulfur and a low aromatic gas oil fraction having a sulfur content of not greater than 1 ppm by mass and a total aromatic content of not greater than 1 % by volume.